RAW SEQUENCE LISTING

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) no errors detected.

Application Serial Number: _10/543,033A_

Source: _1Fwo_

Date Processed by STIC: _11/13/06_

ENTERED

RAW SEQUENCE LISTING   DATE: 11/13/2006
PATENT APPLICATION: US/10/543,033A   TIME: 11:01:47

Input Set : **F:\Substitute seq listing 10589-012-999.txt**
Output Set: **N:\CRF4\11132006\J543033A.raw**

```
 3 <110> APPLICANT: Cao, Liangxian
 4         Trifillis, Panayiota
 6 <120> TITLE OF INVENTION: METHODS FOR IDENTIFYING COMPOUNDS THAT MODULATE UNTRANSLATED
 7         REGION-DEPENDENT GENE EXPRESSION AND METHODS OF USING SAME
 9 <130> FILE REFERENCE: 10589-012-999
11 <140> CURRENT APPLICATION NUMBER: US 10/543,033A
12 <141> CURRENT FILING DATE: 2005-07-21
14 <150> PRIOR APPLICATION NUMBER: PCT/US2004/001643
15 <151> PRIOR FILING DATE: 2004-01-21
17 <150> PRIOR APPLICATION NUMBER: 60/441,637
18 <151> PRIOR FILING DATE: 2003-01-21
20 <160> NUMBER OF SEQ ID NOS: 90
22 <170> SOFTWARE: PatentIn version 3.2
24 <210> SEQ ID NO: 1
25 <211> LENGTH: 14
26 <212> TYPE: DNA
27 <213> ORGANISM: Artificial Sequence
29 <220> FEATURE:
30 <223> OTHER INFORMATION: Description of Artificial Sequence: consensus G-quartet
element from
31         synthetic sequences
34 <220> FEATURE:
35 <221> NAME/KEY: misc_feature
36 <222> LOCATION: 3, 7, 8, 11
37 <223> OTHER INFORMATION: n = a, t, c, or g
39 <220> FEATURE:
40 <221> NAME/KEY: misc_feature
41 <222> LOCATION: (7)..(8)
42 <223> OTHER INFORMATION: This represents one form of the sequence as described, other
forms
43         described may have up to five nucleotides in this variable region
45 <400> SEQUENCE: 1
46 ggntggnngg ntgg                                                    14
49 <210> SEQ ID NO: 2
50 <211> LENGTH: 14
51 <212> TYPE: DNA
52 <213> ORGANISM: Artificial Sequence
54 <220> FEATURE:
55 <223> OTHER INFORMATION: Description of Artificial Sequence: synthetic G-quartet
oligonucleotide
57 <220> FEATURE:
58 <221> NAME/KEY: misc_feature
59 <222> LOCATION: 3, 4, 7, 8, 11, 12
60 <223> OTHER INFORMATION: n = a, t, g or c
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C--> (line 12)
W--> (line 46)

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62 <220> FEATURE:
63 <221> NAME/KEY: misc_feature
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 64 <222> LOCATION: 3, 4, 7, 8, 11, 12
 65 <223> OTHER INFORMATION: This represents one form of the sequence as described, other
forms
 66        described have longer variable regions, typical is 2 - 10
 67        nucleotides
 69 <400> SEQUENCE: 2
W--> 70 ggnnggnngg nngg                                                    14
 73 <210> SEQ ID NO: 3
 74 <211> LENGTH: 61
 75 <212> TYPE: DNA
 76 <213> ORGANISM: Artificial Sequence
 78 <220> FEATURE:
 79 <223> OTHER INFORMATION: Description of Artificial Sequence: Antisense minus uORF NcoI
primer
 81 <400> SEQUENCE: 3
 82 ggccccatgg ctccggctgg acccggctgg gacccggctg ggagggcgcg ggagggcgcg    60
 84 g                                                                    61
 87 <210> SEQ ID NO: 4
 88 <211> LENGTH: 19
 89 <212> TYPE: RNA
 90 <213> ORGANISM: Oryctolagus cuniculus
 92 <220> FEATURE:
 93 <223> OTHER INFORMATION: subunit of 15-LOX-DICE
 95 <400> SEQUENCE: 4
 96 ccccrcccuc uuccccaag                                                 19
 99 <210> SEQ ID NO: 5
100 <211> LENGTH: 152
101 <212> TYPE: DNA
102 <213> ORGANISM: Homo sapiens
104 <400> SEQUENCE: 5
105 gcagaggacc agctaagagg gagagaagca actacagacc ccccctgaaa acaaccctca    60
107 gacgccacat cccctgacaa gctgccaggc aggttctctt cctctcacat actgacccac   120
109 ggctccaccc tctctcccct ggaaaggaca cc                                 152
112 <210> SEQ ID NO: 6
113 <211> LENGTH: 792
114 <212> TYPE: DNA
115 <213> ORGANISM: Homo sapiens
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120 ccctccttca gacaccctca acctcttctg gctcaaaaag agaattgggg gcttagggtc   120
122 ggaacccaag cttagaactt taagcaacaa gaccaccact tcgaaacctg ggattcagga   180
124 atgtgtggcc tgcacagtga attgctggca accactaaga attcaaactg gggcctccag   240
126 aactcactgg ggcctacagc tttgatccct gacatctgga atctggagac cagggagcct   300
128 ttggttctgg ccagaatgct gcaggacttg agaagacctc acctagaaat tgacacaagt   360
130 ggaccttagg ccttcctctc tccagatgtt tccagacttc cttgagacac ggagcccagc   420
132 cctccccatg gagccagctc cctctattta tgtttgcact tgtgattatt tattatttat   480
134 ttattattta tttatttaca gatgaatgta tttatttggg agaccggggt atcctggggg   540
136 acccaatgta ggagctgcct tggctcagac atgttttccg tgaaaacgga gctgaacaat   600
138 aggctgttcc catgtagccc cctggcctct gtgccttctt ttgattatgt tttttaaaat   660
140 atttatctga ttaagttgtc taaacaatgc tgatttggtg accaactgtc actcattgct   720
142 gagcctctgc tccccagggg agttgtgtct gtaatcgccc tactattcag tggcgagaaa   780
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144 taaagtttgc tt                                                    792
147 <210> SEQ ID NO: 7
148 <211> LENGTH: 21
149 <212> TYPE: RNA
150 <213> ORGANISM: Homo sapiens
152 <220> FEATURE:
153 <223> OTHER INFORMATION: Group I AU-Rich element(ARE) cluster of 3'untranslated
region
155 <400> SEQUENCE: 7
156 auuuauuuau uuauuuauuu a                                           21
159 <210> SEQ ID NO: 8
160 <211> LENGTH: 40
161 <212> TYPE: DNA
162 <213> ORGANISM: Homo sapiens
164 <400> SEQUENCE: 8
165 kctggaggat gtggctgcag agcctgctgc tcttgggcac                       40
168 <210> SEQ ID NO: 9
169 <211> LENGTH: 289
170 <212> TYPE: DNA
171 <213> ORGANISM: Homo sapiens
173 <400> SEQUENCE: 9
174 gccggggagc tgctctctca tgaaacaaga gctagaaact caggatggtc atcttggagg       60
176 gaccaagggg tgggccacag ccatggtggg agtggcctgg acctgccctg ggccacactg      120
178 accctgatac aggcatggca gaagaatggg aatattttat actgacagaa atcagtaata      180
180 tttatatatt tatattttta aaatatttat ttatttattt atttaagttc atattccata      240
182 tttattcaag atgttttacc gtaataatta ttattaaaaa tatgcttct               289
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186 <211> LENGTH: 7008
187 <212> TYPE: DNA
188 <213> ORGANISM: Artificial Sequence
190 <220> FEATURE:
191 <223> OTHER INFORMATION: Description of Artificial Sequence: Expression Vector pCMRI
193 <400> SEQUENCE: 10
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196 ccgcatagtt aagccagtat ctgctccctg cttgtgtgtt ggaggtcgct gagtagtgcg      120
198 cgagcaaaat ttaagctaca acaaggcaag gcttgaccga caattgcatg aagaatctgc      180
200 ttagggttag gcgtttttgcg ctgcttcgcg atgtacgggc cagatatacg cgttgacatt      240
202 gattattgac tagttattaa tagtaatcaa ttacggggtc attagttcat agcccatata      300
204 tggagttccg cgttacataa cttacggtaa atggcccgcc tggctgaccg cccaacgacc      360
206 cccgcccatt gacgtcaata atgacgtatg ttcccatagt aacgccaata gggactttcc      420
208 attgacgtca atgggtggag tatttacggt aaactgccca cttggcagta catcaagtgt      480
210 atcatatgcc aagtacgccc cctattgacg tcaatgacgg taaatggccc gcctggcatt      540
212 atgcccagta catgacctta tgggactttc ctacttggca gtacatctac gtattagtca      600
214 tcgctattac catggtgatg cggttttggc agtacatcaa tgggcgtgga tagcggtttg      660
216 actcacgggg atttccaagt ctccacccca ttgacgtcaa tgggagtttg ttttggcacc      720
218 aaaatcaacg ggactttcca aaatgtcgta acaactccgc cccattgacg caaatgggcg      780
220 gtaggcgtgt acggtgggag gtctatataa gcagagctct ctggctaact aagctttcgg      840
222 cgcgccgagg taccatggga tccgaagacg ccaaaaacat aaagaaaggc ccggcgccat      900
224 tctatcctct agaggatgga accgctggag agcaactgca taaggctatg aagagatacg      960
226 ccctggttcc tggaacaatt gcttttacag atgcacatat cgaggtgaac atcacgtacg     1020
```

```
228 cggaatactt cgaaatgtcc gttcggttgg cagaagctat gaaacgatat gggctgaata 1080
230 caaatcacag aatcgtcgta tgcagtgaaa actctcttca attctttatg ccggtgttgg 1140
232 gcgcgttatt tatcggagtt gcagttgcgc ccgcgaacga catttataat gaacgtgaat 1200
234 tgctcaacag tatgaacatt tcgcagccta ccgtagtgtt tgtttccaaa aaggggttgc 1260
236 aaaaaatttt gaacgtgcaa aaaaaattac caataatcca gaaaattatt atcatggatt 1320
238 ctaaaacgga ttaccaggga tttcagtcga tgtacacgtt cgtcacatct catctacctc 1380
240 ccggttttaa tgaatacgat tttgtaccag agtcctttga tcgtgacaaa acaattgcac 1440
242 tgataatgaa ttcctctgga tctactgggt tacctaaggg tgtggccctt ccgcatagaa 1500
244 ctgcctgcgt cagattctcg catgccagag atcctatttt tggcaatcaa atcattccgg 1560
246 atactgcgat tttaagtgtt gttccattcc atcacggttt tggaatgttt actacactcg 1620
248 gatatttgat atgtggattt cgagtcgtct taatgtatag atttgaagaa gagctgtttt 1680
250 tacgatccct tcaggattac aaaattcaaa gtgcgttgct agtaccaacc ctattttcat 1740
252 tcttcgccaa aagcactctg attgacaaat acgattatc taatttacac gaaattgctt 1800
254 ctggggggcgc acctctttcg aaagaagtcg gggaagcggt tgcaaaacgc ttccatcttc 1860
256 cagggatacg acaaggatat gggctcactg agactacatc agctattctg attacacccg 1920
258 aggggatga taaaccgggc gcggtcggta aagttgttcc atttttgaa gcgaaggttg 1980
260 tggatctgga taccgggaaa acgctgggcg ttaatcagag aggcgaatta tgtgtcagag 2040
262 gacctatgat tatgtccggt tatgtaaaca atccggaagc gaccaacgcc ttgattgaca 2100
264 aggatggatg gctacattct ggagacatag cttactggga cgaagacgaa cacttcttca 2160
266 tagttgaccg cttgaagtct ttaattaaat acaaaggata tcaggtggcc cccgctgaat 2220
268 tggaatcgat attgttacaa cacccccaaca tcttcgacgc gggcgtggca ggtcttcccg 2280
270 acgatgacgc cggtgaactt cccgccgccg ttgttgtttt ggagcacgga aagacgatga 2340
272 cggaaaaaga gatcgtggat tacgtcgcca gtcaagtaac aaccgcgaaa aagttgcgcg 2400
274 gaggagttgt gtttgtggac gaagtaccga aaggtcttac cggaaaactc gacgcaagaa 2460
276 aaatcagaga gatcctcata aaggccaaga agggcggaaa gtccaaattg cgcggccgct 2520
278 aactcgagaa taaaatgagg aaattgcatc gcattgtctg agtaggtgtc attctattct 2580
280 gggggtggg gtggggcagg acagcaaggg ggaggattgg gaagacaata gcaggcatgc 2640
282 tggggatgcg gtgggctcta tggcttctga ggcggaaaga accagctggg gctctagggg 2700
284 gtatccccac gcgccctgta gcggcgcatt aagcgcggcg ggtgtggtgg ttacgcgcag 2760
286 cgtgaccgct acacttgcca gcgccctagc gcccgctcct ttcgctttct tcccttcctt 2820
288 tctcgccacg ttcgccggct ttccccgtca agctctaaat cggggggctcc ctttagggtt 2880
290 ccgatttagt gctttacggc acctcgaccc caaaaaactt gattagggtg atggttcacg 2940
292 tagtgggcca tcgccctgat agacggtttt tcgccctttg acgttggagt ccacgttctt 3000
294 taatagtgga ctcttgttcc aaactggaac aacactcaac cctatctcgg tctattcttt 3060
296 tgatttataa gggattttgc cgatttcggc ctattggtta aaaaatgagc tgatttaaca 3120
298 aaaátttaac gcgaattaat tctgtggaat gtgtgtcagt tagggtgtgg aaagtccca 3180
300 ggctccccag caggcagaag tatgcaaagc atgcatctca attagtcagc aaccaggtgt 3240
302 ggaaagtccc caggctcccc agcaggcaga agtatgcaaa gcatgcatct caattagtca 3300
304 gcaaccatag tcccgcccct aactccgccc atcccgcccc taactccgcc cagttccgcc 3360
306 cattctccgc cccatggctg actaattttt tttatttatg cagaggccga ggccgcctct 3420
308 gcctctgagc tattccagaa gtagtgagga ggcttttttg gaggcctagg cttttgcaaa 3480
310 aagctcccgg gagcttgtat atccatttc ggatctgatc agcacgtgat gaaaaagcct 3540
312 gaactcaccg cgacgtctgt cgagaagttt ctgatcgaaa agttcgacag cgtctccgac 3600
314 ctgatgcagc tctcggaggg cgaagaatct cgtgctttca gcttcgatgt aggagggcgt 3660
316 ggatatgtcc tgcgggtaaa tagctgcgcc gatggtttct acaaagatcg ttatgtttat 3720
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320 gagagcctga cctattgcat ctcccgccgt gcacagggtg tcacgttgca agacctgcct 3840
322 gaaaccgaac tgcccgctgt tctgcagccg gtcgcggagg ccatggatgc gatcgctgcg 3900
324 gccgatctta gccagacgag cgggttcggc ccattcggac cgcaaggaat cggtcaatac 3960
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RAW SEQUENCE LISTING   DATE: 11/13/2006
PATENT APPLICATION: US/10/543,033A TIME: 11:01:47

Input Set : F:\Substitute seq listing 10589-012-999.txt
Output Set: N:\CRF4\11132006\J543033A.raw

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326 actacatggc gtgatttcat atgcgcgatt gctgatcccc atgtgtatca ctggcaaact 4020
328 gtgatggacg acaccgtcag tgcgtccgtc gcgcaggctc tcgatgagct gatgctttgg 4080
330 gccgaggact gccccgaagt ccggcacctc gtgcacgcgg atttcggctc caacaatgtc 4140
332 ctgacggaca atggccgcat aacagcggtc attgactgga gcgaggcgat gttcggggat 4200
334 tcccaatacg aggtcgccaa catcttcttc tggaggccgt ggttggcttg tatggagcag 4260
336 cagacgcgct acttcgagcg gaggcatccg gagcttgcag gatcgccgcg gctccgggcg 4320
338 tatatgctcc gcattggtct tgaccaactc tatcagagct tggttgacgg caatttcgat 4380
340 gatgcagctt gggcgcaggg tcgatgcgac gcaatcgtcc gatccggagc cgggactgtc 4440
342 gggcgtacac aaatcgcccg cagaagcgcg gccgtctgga ccgatggctg tgtagaagta 4500
344 ctcgccgata gtggaaaccg acgccccagc actcgtccga gggcaaagga atagcacgtg 4560
346 ctacgagatt tcgattccac cgccgccttc tatgaaaggt tgggcttcgg aatcgttttc 4620
348 cgggacgccg gctggatgat cctccagcgc ggggatctca tgctggagtt cttcgcccac 4680
350 cccaacttgt ttattgcagc ttataatggt tacaaataaa gcaatagcat cacaaatttc 4740
352 acaaataaag catttttttc actgcattct agttgtggtt tgtccaaact catcaatgta 4800
354 tcttatcatg tctgtatacc gtcgacctct agctagagct tggcgtaatc atggtcatag 4860
356 ctgtttcctg tgtgaaattg ttatccgctc acaattccac acaacatacg agccggaagc 4920
358 ataaagtgta aagcctgggg tgcctaatga gtgagctaac tcacattaat tgcgttgcgc 4980
360 tcactgcccg ctttccagtc gggaaacctg tcgtgccagc tgcattaatg aatcggccaa 5040
362 cgcgcgggga gaggcggttt gcgtattggg cgctcttccg cttcctcgct cactgactcg 5100
364 ctgcgctcgg tcgttcggct gcggcgagcg gtatcagctc actcaaaggc ggtaatacgg 5160
366 ttatccacag aatcagggga taacgcagga aagaacatgt gagcaaaagg ccagcaaaag 5220
368 gccaggaacc gtaaaaaggc cgcgttgctg gcgtttttcc ataggctccg cccccctgac 5280
370 gagcatcaca aaaatcgacg ctcaagtcag aggtggcgaa acccgacagg actataaaga 5340
372 taccaggcgt ttccccctgg aagctccctc gtgcgctctc ctgttccgac cctgccgctt 5400
374 accggatacc tgtccgcctt tctcccttcg ggaagcgtgg cgctttctca tagctcacgc 5460
376 tgtaggtatc tcagttcggt gtaggtcgtt cgctccaagc tgggctgtgt gcacgaaccc 5520
378 cccgttcagc ccgaccgctg cgccttatcc ggtaactatc gtcttgagtc caacccggta 5580
380 agacacgact tatcgccact ggcagcagcc actggtaaca ggattagcag agcgaggtat 5640
382 gtaggcggtg ctacagagtt cttgaagtgg tggcctaact acggctacac tagaagaaca 5700
384 gtatttggta tctgcgctct gctgaagcca gttaccttcg gaaaaagagt tggtagctct 5760
386 tgatccggca aacaaaccac cgctggtagc ggtttttttg tttgcaagca gcagattacg 5820
388 cgcagaaaaa aaggatctca agaagatcct ttgatctttt ctacggggtc tgacgctcag 5880
390 tggaacgaaa actcacgtta agggattttg gtcatgagat tatcaaaaag gatcttcacc 5940
392 tagatccttt taaattaaaa atgaagtttt aaatcaatct aaagtatata tgagtaaact 6000
394 tggtctgaca gttaccaatg cttaatcagt gaggcaccta tctcagcgat ctgtctattt 6060
396 cgttcatcca tagttgcctg actccccgtc gtgtagataa ctacgatacg ggagggctta 6120
398 ccatctggcc ccagtgctgc aatgataccg cgagacccac gctcaccggc tccagattta 6180
400 tcagcaataa accagccagc cggaagggcc gagcgcagaa gtggtcctgc aactttatcc 6240
402 gcctccatcc agtctattaa ttgttgccgg gaagctagag taagtagttc gccagttaat 6300
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412 agatgctttt ctgtgactgg tgagtactca accaagtcat tctgagaata gtgtatgcgg 6600
414 cgaccgagtt gctcttgccc ggcgtcaata cgggataata ccgcgccaca tagcagaact 6660
416 ttaaaagtgc tcatcattgg aaaacgttct cggggcgaa aactctcaag gatcttaccg 6720
418 ctgttgagat ccagttcgat gtaacccact cgtgcaccca actgatcttc agcatctttt 6780
420 actttcacca gcgtttctgg gtgagcaaaa acaggaaggc aaaatgccgc aaaaaaggga 6840
422 ataagggcga cacggaaatg ttgaatactc atactcttcc tttttcaata ttattgaagc 6900
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RAW SEQUENCE LISTING ERROR SUMMARY   DATE: 11/13/2006
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Please Note:
Use of n and/or Xaa have been detected in the Sequence Listing. Please review the
Sequence Listing to ensure that a corresponding explanation is presented in the <220>
to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:1; N Pos. 3,7,8,11
Seq#:2; N Pos. 3,4,7,8,11,12
Seq#:13; N Pos. 1,15
Seq#:33; N Pos. 409,444
Seq#:40; N Pos. 535,734

Invalid Line Length:
The rules require that a line not exceed 72 characters in length. This includes spaces.

Seq#:2; Line(s) 55

VERIFICATION SUMMARY   DATE: 11/13/2006
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L:12 M:271 C: Current Filing Date differs, Replaced Current Filing Date
L:46 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1 after pos.:0
L:70 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2 after pos.:0
L:472 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:13 after pos.:0
L:1830 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:33 after pos.:360
M:341 Repeated in SeqNo=33
L:2041 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:40 after pos.:480
M:341 Repeated in SeqNo=40
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